

Amendments to the Claims are as follows:

1. (Currently Amended) A positioning device ~~(1)~~ for an X-ray detector ~~(11)~~ or an X-ray source that comprises:

~~(23), having an arched arm; and~~  
a base,

~~wherein (15) in which the an X-ray detector (11) or the an X-ray source (23) can be supported displaceably on the arched arm and displaceable in the direction of the arch of the arched arm, and~~

~~wherein the and having a base (9) in which the arched arm (15) is supported by the base and is displaceable in the direction of the arch.~~

2. (Currently Amended) The positioning device ~~(1)~~ as defined by according to claim 1,

wherein the arched arm ~~(15)~~ is supported in a second arched arm and displaceable in the direction of the arch of the second arched arm ~~in a second arched arm (13); and~~

wherein the second arched arm ~~(13)~~ is supported in the base and is displaceable in the direction of the arch of the second arched arm ~~in the base (9).~~

3. (Currently Amended) The positioning device ~~(1)~~ as defined by according to one of the foregoing claims claim 1,

wherein the X-ray detector ~~(11)~~ or the X-ray source ~~(23)~~ can be supported ~~movably~~ in the arched arm ~~(15)~~ and movable in the radial direction relative to the arch of the arched arm.

4. (Currently Amended) A patient-supporting support device ~~(5, 7), which has~~ device comprising:

a positioning device comprising: ~~(1) as defined by one of the foregoing~~  
~~claims~~

an arched arm; and  
a base,

wherein an X-ray detector or an X-ray source can be supported on the

arched arm and displaceable in the direction of the arch of the arched arm, and  
wherein the arched arm is supported by the base and is displaceable in the  
direction of the arch of the arched arm.

5. (Currently Amended) The patient-supporting support device ~~(5, 7)~~ as defined by claim 4, having a patient-supporting support table ~~(5)~~, wherein the positioning device ~~(1)~~ is located underneath the patient-supporting table ~~(5)~~.

6. (Currently Amended) An X-ray machine comprising ~~(21)~~, ~~which has~~  
a patient-supporting device comprising:  
an arched arm; and  
a base,  
wherein an X-ray detector or an X-ray source can be supported on the  
arched arm and displaceable in the direction of the arch of the arched arm, and  
wherein the arched arm is supported by the base and is displaceable in the  
direction of the arch of the arched arm; (5, 7) as defined by one of claims 4 or 5  
and  
an X-ray source, ~~(23)~~, supported ~~movably~~ movably in all directions in space  
and located separately from the positioning device ~~(1)~~.

7. (Currently Amended) The X-ray machine ~~(21)~~ ~~as defined by~~ according to  
claim 6, which has a control unit ~~(27)~~, ~~which unit that~~ is connected to the X-ray  
source ~~(23)~~ and the positioning device, wherein the control unit (1) and which is  
embodied so as to move the X-ray source ~~(23)~~ and the positioning device ~~(1)~~ in a  
manner adapted to one another, so that they assume a predetermined orientation  
to one another.

8. (Currently Amended) An X-ray machine comprising ~~(21)~~, ~~which has~~  
a patient-supporting device comprising:  
an arched arm; and  
a base,  
wherein an X-ray detector or an X-ray source can be supported on the  
arched arm and displaceable in the direction of the arch of the arched arm, and  
wherein the arched arm is supported by the base and is displaceable in the

direction of the arch of the arched arm; (5, 7) as defined by one of claims 4 or 5  
and

an X-ray detector (11), supported movably in all directions in space and located separately from the positioning device (1).

9. (Currently Amended) The X-ray machine (21) as defined by claim 8, which has a control unit (27), which unit that is connected to the X-ray detector (11) and the positioning device, wherein the control unit (1) and which is embodied so as to move the X-ray detector (11) and the positioning device (1) in a manner adapted to one another, so that they assume a predetermined orientation to one another.

10. (New) The positioning device according to claim 2, wherein the X-ray detector or the X-ray source can be supported in the arched arm and movable in the radial direction relative to the arch of the arched arm.

11. (New) The patient-support device as defined by claim 4 having a patient-support table, wherein the positioning device is located underneath the patient-support table.

12. (New) The patient-support device as defined by claim 4 wherein the X-ray source is supported movably in all directions in space and located separately from the positioning device.

13. (New) The positioning device according to claim 10 wherein the X-ray source is supported movably in all directions in space and located separately from the positioning device.

14. (New) The positioning device according to claim 13, which has a control unit that is connected to the X-ray source and the positioning device, wherein the control unit is operable to move the X-ray source and the positioning device in a manner adapted to one another, so that the X-ray source and the positioning device assume a predetermined orientation to one another.

15. (New) The patient support device according to claim 12, which has a

control unit that is connected to the X-ray source and the positioning device, wherein the control unit is operable to move the X-ray source and the positioning device in a manner adapted to one another, so that the X-ray source and the positioning device assume a predetermined orientation to one another.